

Abstract of the Disclosure:

A process for producing a wear-resistant cylinder bearing surface includes rotating a laser about its longitudinal axis and simultaneously advancing the laser in a direction of the longitudinal axis which is coaxial with a cylinder of a crankcase. A powdery material is fed through the laser and a jet of the powdery material is directed toward the cylinder bearing surface. A laser beam is deflected to an impact region where the jet of the powdery material impinges on the cylinder bearing surface. The jet of the powdery material passes through the laser beam. The laser beam at least partially melts the impact region before the powdery material impinges on the impact region. A device for producing wear-resistant surfaces is also provided.

MB/cp